



National Aeronautics and  
Space Administration  
**Lyndon B. Johnson Space Center**  
Houston, Texas



## Beach bums

JSC scientists went to extremes last summer for space science. Story on Page 3.



## Kidstat imaging

Webster Intermediate students make Earth observations using the STS-81 crew and *Atlantis*. Story on Page 4.

# Space News Roundup

Vol. 36

January 17, 1997

No. 3



From left, Astronaut John Blaha welcomes STS-81 Mission Specialist Jerry Linenger and Commander Mike Baker aboard the Russian Mir Space Station on Tuesday after Baker and his crew successfully docked *Atlantis* to the station. Linenger became a Mir crew member at 3:45 a.m. CST Wednesday and will spend four months on the station while Blaha returns to Earth on *Atlantis* marking 188 days on Mir.

## First '97 blood drive set for next week

President Bill Clinton has recognized January as National Volunteer Blood Donor month and JSC will kick off its first blood drive of 1997 next Tuesday and Wednesday.

"For millions of people across the country, the generosity of a volunteer blood donor means the difference between life and death," said Clinton in a letter to St. Luke's Hospital, JSC's blood donor program partner. "Donating blood is safe and quick taking only an hour out of the day. Through this simple process, donors can bestow on someone in need the precious gift of life."

Every year, the holidays put a great strain on the local blood supply.

Inclement weather, vacations and illnesses tend to decrease donor participation while the need for blood increases drastically. Local news program have reported a critical shortage of blood in the Houston area. Donations are needed to help alleviate this shortage.

Employees wishing to donate can visit the Teague Auditorium anytime between 7:30 a.m.-3:30 p.m. on Tuesday and 8 a.m.-noon on Wednesday. Appointments are necessary only if employees plan on donating platelets or plasma, but no appointments are necessary for whole blood donations.

The previous three blood drives

have had record turnouts, and the center hopes to make this the best January drive ever. Employees are encouraged to "bring a buddy" if possible. All donors will receive a free T-shirt for their participation in this blood drive.

"I urge all my fellow Americans to consider donating blood," said Clinton. "Our participation in this compassionate crusade can help to prolong and save lives, giving hope to thousands of individuals and their families."

For more information about donating blood and future drives, call Dan Mangieri at x33003 or Amy Mendez at x32604.

## Blaha's ride home arrives to Mir station

By Karen Schmidt

The STS-81 astronauts and Mir 22 cosmonauts came together late Tuesday as *Atlantis* made a picture perfect docking to begin joint operations between two nations.

John Blaha and his Mir 22 crew mates welcomed his fellow astronauts to the Russian space station Tuesday night after *Atlantis* docked at 9:55 p.m. CST as the two space craft streaked over Russia. Commander Mike Baker opened the hatch between the two space craft at 11:57 CST. The STS-81 crew was welcomed by Mir 22 Commander Valeri Korzun, Flight Engineer Alexander "Sasha" Kaleri and Blaha.

"Welcome to space station Mir, a truly international space station," said Blaha during the welcoming ceremony in Mir's base block. "This is kinda neat, this international space station called Mir, shuttles coming up here and dock and bringing stuff and people and then the shuttles leaves taking stuff back down. That's really fantastic. We are truly in the space station business."

Mission Specialist John Grunsfeld and Jeff Wisoff munched on bread, a traditional Russian welcoming gift, as Mission Specialist Marsha Ivins unpack fresh fruit amid cheers from the Mir crew. Both crews participated in welcoming ceremonies in Mir's base block marking the beginning of five days

of docked operations.

"I was looking out the window this morning and picked up the shuttle about eight miles away," said Blaha. "It was a shining star that got bigger and bigger and the sun came up and bam you saw the shuttle and it was quite a beautiful sight."

Blaha and Mission Specialist Jerry Linenger exchange initial greetings in the orbiter docking module that links the two space craft together. Linenger became a Mir 22 crew member at 3:45 a.m. CST when his Soyuz seat liner was transferred to Mir and Blaha's taken onboard

*Atlantis* ending Blaha's stay on Mir after 118 days on the Russian outpost. As he explored the station Capcom Chris Hadfield asked, "How's home look?"

"It's looks great," said Linenger. "John looks good, everybody looks good and happy. I ate some bread already, taste delicious."

Earlier in the day Linenger was ask how his wife, Kathryn, was handling his trip to Mir and doing her part in training both himself and his replacement Mike Foale.

"It's her mission, too," he said. "When I'm over in Russia she's over there with me. As a matter of fact, she's still over in Russia, training the person who is going to come and take my place, Mike Foale. So I'm sure she's got a little extra motivation to get Mike ready

Please see **PHASE**, Page 4



## Norbraten, Remington to take on new roles

Last week, JSC Director George Abbey chose Lee Norbraten and Dan Remington to take on the responsibility of heading up their organizations.

Lee Norbraten has been named director of the ISO 9000 Project Office. He previously served as deputy director of that office. Norbraten replaces Charles Harlan who retired this month.

Norbraten will lead the transition from the current NASA Quality Management System to the internationally recognized ISO 9000 standards. The transition will include imposing ISO 9000 requirements on JSC contracts

and in-house organizations. Norbraten's office will be responsible for managing the complex certification process and evaluating the effectiveness of the implementation program.

Prior to his assignment in the ISO 9000 Office, Norbraten served as a flight manager in the Space Shuttle Program Office, with the responsibility for the overall planning of specific shuttle missions, including the first International Space Station assembly mission. As the deputy manager of the Space Shuttle Systems Engineering Office, Norbraten developed the capability for the shuttle to update

ascent guidance commands on launch day based on observed wind conditions. Norbraten joined NASA in 1967, helping to design the return trajectories from the moon during the Apollo Program.

Dan Remington will serve as the acting chief counsel for the JSC Legal Office. He has worked as an attorney at JSC for 25 years. He has served as the assistant chief for general legal matters for the past nine years. Remington replaces Hank Flagg who retired this month.

He will be responsible for managing the office and providing in-depth legal support to

the center's activities, including any satellite installations. Key among his responsibilities

are supporting the procurement function, administering the center's ethics program and providing representation in the various forms of litigation in which the center may be involved. He will provide advice and assistance to the JSC Director and organizational components in planning, directing and conducting center activities.

Remington Joined NASA as an attorney advisor in 1971. He received his law degree from the University of Houston Law School in 1970.



Norbraten



Remington

## Thagard, Lucid donate space suits to Smithsonian

Former Astronaut Norman Thagard, the first American to ride aboard a Russian rocket when launched to the Russian Mir Space Station, and Astronaut Shannon Lucid, presented the space suits they wore on their flights to the Smithsonian Tuesday at the National Air and Space Museum.

A veteran of five space missions, Thagard was launched to Mir on a Russian Soyuz rocket on March 14, 1995. He returned to Earth on July 7, 1995 on *Atlantis* at the conclusion of the first shuttle/Mir docking mission. Thagard presented the sokol suit he wore during ascent in the Soyuz rocket to the Mir station.

"The future of space is one of international cooperation," Thagard said during the presentation. "If what I saw in my Mir/shuttle experience is true, it is a very bright future. I am thrilled to have this suit be given to the Smithsonian."

Shannon Lucid, who replaced Thagard aboard Mir and set a record for the longest spaceflight by an American, donated her penguin suit that was used to maintain muscle tone in her body.

"I am very glad that we have the opportunity to donate the penguin suit," said Lucid. "I hope that it will be a valuable contribution to the space exhibit."



Ice on trees around the center greeted employees upon their arrival at work on Monday. While the majority of Houston streets were covered in the slick stuff, roads around JSC were clear and employees reported to work as usual.

JSC Photo by Mark Sowa

## Icy conditions greet workers Monday morning

Employees were greeted to an unusual sight around the center on Monday as freezing conditions left ice covering the majority of the vegetation around JSC.

"Work control was kept pretty busy Monday as they tried to keep pedestrians safe around the center," said Bill Roeh, chief of the Plant Engineering Division. "We experienced very few icy conditions on sidewalks and roadways and we were able to treat those conditions immediately upon discovery. Most of the ice was confined to vegetation

Please see **WORKERS**, Page 4